

IN THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application. Changes to the claims are shown with additions double underlined and deletions in ~~strikeout~~. No new matter has been added.

Claim 1 (Presently Amended) A method of classifying Objects using a vector space having ~~multiple~~ a plurality of preclassified data clusters comprising ~~the steps of~~ :

- C₁²
- a. inputting a data stream that describes the Object;
 - b. abstracting the data stream to calculate an Object vector that characterizes the data stream;
 - c. identifying a preclassified data cluster of the plurality of the preclassified data cluster clusters, if any, within which the Object vector rests;
 - d. assigning to the Object the ~~status~~ classification of the identified preclassified data cluster or, if the Object vector rests outside of each of the plurality of preclassified data clusters, classifying the Object within an atypical cluster, the atypical cluster being associated with the position of the Object vector, ~~no cluster is identified, assigning to the Object the status of~~ atypical.

Claim 2 (Original). The method of claim 1, wherein abstracting is performed by a process comprising selecting between 5 and 25 data points from the data stream.

Claim 3 (Original). The method of claim 1, wherein identifying is performed by a process comprising computing the Euclidean distance between the centroid of a data cluster and the Object vector.

Claim 4 (Original). The method of claim 1, wherein identifying is performed by a process comprising computing the normalized vector product of the Object vector and representing the centroid of a data cluster.

Claim 5 (Original). The method of claim 1, wherein each data cluster is preclassified as having one of two status conditions.

Claim 6 (Original). The method of claim 1, wherein each data cluster is preclassified as having one of three status conditions.

Claim 7 (Original). The method of claim 1, wherein the data streams consist of between 1,000 and 20,000 data points.

Claim 8 (Original). The method of claim 1, wherein the length of the data streams consist of at least 1,000 data points.

12 Claims 9-20 (Cancelled).

Claim 21 (Presently Amended) A software product for a general purpose digital computer, accompanied by instructions that the product can be used to perform the method of claim 1 ~~or of claim 9~~.

Claim 22 (Presently Amended) A software product, which performs or causes to be performed on a general purpose digital computer the method of claim 1 ~~or claim 9~~.

Claim 23 (Presently Amended) A general purpose digital computer, programmed so as to ~~performs~~ perform or cause to be performed the method of claim 1 ~~or claim 9~~.
